D

(M

M

that that the test can stee the the

1. network for distributing information (1), (19) between central unit and stations (3-18), comprising\ information splitting devices (20-22) with inputs/outputs connected on the one hand to the central unit (19) and on the other hand to the stations (3-18), interface device (23-38)an in each station. characterized \in that the interface device (23-38) of each station (3-18) is linked to a first splitting device and to a \second splitting device.

- network The as claimed in claim 1, characterized in that several interface devices mounted in cascade on a link starting from a splitting device.
- 3. The network\as claimed in one of claims 1 to 2, characterized in that an interface device comprises a means for detecting a fault relating to a problem on a link between this interface device and the first or the second splitting device.
- The network claimed in claim as 3. the means for detecting faults characterized in that comprises means for multual acknowledgement with the central unit.
- The network as claimed in one of claims 1 to 4, 25 5. characterized in that it \comprises a device (48) for switching over from the first splitting device to the second splitting device.
- 6. The network claimed in claim 5, as characterized in that the switching device (48) is in 30 the central unit (19).
 - The network as claimed \in one of claims 1 to 6, characterized in that a link between a splitting device and an interface device is effected with a cable (39) having two twisted conductors.
 - The network as claimed in one of claims 1 to 7, 8. characterized in that a splitting device is linked by a link connected to one of its inputs (05-57) to single special interface device (53, 54),

10

20

35

15

10

15

30

special interface device being linked by another link connected to another input/output (58-60) of another splitting device.

- 9. The network as claimed in one of claims 1 to 8, characterized in that each splitting device is capable of supporting a bit rate greater than a nominal bit rate.
- 10. The network as claimed in one of claims 1 to 9, characterized in that addresses used to identify elements of the network comprise fields of which a first field makes it possible to identify a group of stations connected to a splitting device identified by a second field and that a modification of a value of the second field makes it possible to connect a group of stations to another splitting device.
 - 11. A process for splitting the effects of a fault in a network for distributing information among terminals

characterized in that

- N splitting devices are linked, according to a star topology, to a central unit with the aid of transport means over each of which a primary stream travels, to a splitting device of rank m there corresponds a primary stream FP_m ,
- the splitting devices are furnished with first inputs/outputs A_i to A_i and with second inputs/outputs B_i to B_j ,
 - the first input outputs A_1 to A_i of a splitting device K are linked by buses K_1 to K_i to the second inputs/outputs B_1 to B_i of a consecutive splitting device K + 1, with 1 \leq K \leq N,
 - terminals are linked in cascade to each bus K_1 to K_i ,
- the first inputs/outputs A_1 to A_i of the 35 splitting devices 1 to N are activated,
 - upon a fault between a terminal linked by a splitting device K to the central unit, a first input/output A_1 to A_i of the splitting device K is deactivated,

5

20

- a second input/output $B_{\rm i}$ to $B_{\rm i}$ of the splitting device K + 1 is activated.
- 12. The process as claimed in claim 11, characterized in that
- upon an event relating to the splitting device K, the first inputs/outputs A_1 to A_i of the splitting devices K + 1 to N are deactivated,
- the second inputs/outputs $B_{\rm i}$ to $B_{\rm i}$ of the splitting devices K + 1 to N are activated.
- 10 13. The process as claimed in one of claims 11 or 12, characterized in that
 - upon a fault, some of the first inputs/outputs A_1 to A_i of the splitting device K + 1 are activated.
- 15 14. The process as claimed in one of claims 11 to 13, characterized in that
 - upon another event relating to a splitting device $K \pm n$, a number of first inputs/outputs and a number of second inputs/outputs to be activated for each of a number of devices available between the splitting devices K and $K \pm n$ are determined as a function of these available devices, this number being different by one unit at most between two available devices,
- inputs/outputs thus determined from among the inputs/outputs A_i to A_i and or B_i to B_j are activated.